



2877#  
PATENT  
Customer Number 22,852  
Attorney Docket No. 5788.0124.00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Paola CARACINO et al. )  
Serial No.: 09/498,062 ) Group Art Unit: 2827  
Filed: February 4, 2000 ) Examiner: Cuneo, K.  
For: HIGH TEMPERATURE )  
SUPERCONDUCTING CABLE )

RECEIVED  
NOV 22 2002  
TC 2300 MAIL ROOM

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:


**TRANSMITTAL LETTER**

Enclosed is a response to the Office Action mailed May 21, 2002. The items checked below are attached:

- ☒ Reply to Office Action;
- ☒ Second Amendment;
- ☒ Appendix to Second Amendment Dated November 20, 2002;
- ☒ Request for Approval of Drawing Change (with new Figs. 3, 4a, 4b, 4c, and 4d);
- ☒ Petition for Extension of Time (five month); and
- ☒ Check in the amount of \$1,960.00 (five-month extension fee).

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Dated: November 20, 2002

By:   
Lawrence F. Galvin  
Reg. No. 44,694

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



PATENT  
Customer Number 22,852  
Attorney Docket No. 5788.0124.00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
Paola CARACINO et al. )  
Serial No.: 09/498,062 ) Group Art Unit: 2827  
Filed: February 4, 2000 ) Examiner: Cuneo, K.  
For: HIGH TEMPERATURE )  
SUPERCONDUCTING CABLE )

RECEIVED  
NOV 22 2002  
TC 2800 MAIL ROOM

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**REPLY TO OFFICE ACTION**

Applicants submit this Reply to Office Action, together with a Second Amendment, an Appendix to Second Amendment Dated November 20, 2002, a Request for Approval of Drawing Change, and a Petition for Extension of Time, in response to the Office Action mailed May 21, 2002.

**Tubular Support v. Superconducting Tape**

Initially, Applicants note that Fig. 1 is a schematic view of a high-temperature, superconducting cable according to the invention, with portions cut away for viewing clarity. The visible portions include, inter alia, tubular support 6, phase conductor 4, dielectric material 8, optional tubular support 7, and neutral conductor 5.

Tubular support 6 may, for example, have a continuous structure, either smooth or corrugated. (Specification, p. 7/ll. 10-11 and p. 10/ll. 16-18). Alternatively, tubular support 6 may, for example, be a spirally-wound metal strip or have a tile structure, with spirally-

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

connected adjacent sectors. (Id., p. 7/ll. 11-14 and p. 10/ll. 18-20). Tubular support 6 itself does not comprise a second tape 25. A similar discussion applies to optional tubular support 7.

Phase conductor 4 includes at least a layer of superconducting material incorporated in a plurality of superposed superconducting tapes 20. (Id., p. 8/ll. 21-27). Fig. 2 is a cross-sectional, schematic view of a superconducting tape 20 with a metal strip, band, or laminate 25, while Fig. 3 is a cross-sectional, schematic view of a high-temperature, superconducting tape 20 with two metal strips, bands, laminates, or combinations thereof 25. A similar discussion applies to neutral conductor 5.

Superconducting tapes 20 may be spirally-wound on tubular support 6. (Id., p. 8/ll. 25-28). A similar discussion applies to optional tubular support 7.

#### Reevaluation of the Election of Species Requirement

In light of the above discussion, Applicants respectfully submit that the Examiner's characterizations of species directly associating the tubular supports with a specific number of metal strips, bands, laminates, or combinations thereof 25 do not appear well-founded.

As a result, Applicants respectfully request that the Examiner reevaluate the election of species requirement.

#### Election of Species

In the Office Action mailed May 21, 2002, the Examiner required an election of species under 35 U.S.C. § 121 between species a1, characterized by the Examiner as the tubular supports being copper and smooth or corrugated; species b1, characterized by the Examiner as the tubular supports being stainless steel or aluminum and smooth or corrugated; species c1, characterized by the Examiner as the tubular supports being copper and spirally wound; species d1,

characterized by the Examiner as the tubular supports being stainless steel or aluminum and spirally wound; species e1, characterized by the Examiner as the tubular supports being copper and having a tile structure; species f1, characterized by the Examiner as the tubular supports being stainless steel or aluminum and having a tile structure; species a2, characterized by the Examiner as the tubular supports being copper and smooth or corrugated and a second tape (25); species b2, characterized by the Examiner as the tubular supports being stainless steel or aluminum and smooth or corrugated and a second tape (25); species c2, characterized by the Examiner as the tubular supports being copper and spirally wound and a second tape (25); species d2, characterized by the Examiner as the tubular supports being stainless steel or aluminum and spirally wound and a second tape (25); species e2, characterized by the Examiner as the tubular supports being copper and having a tile structure and a second tape (25); and species f2, characterized by the Examiner as the tubular supports being stainless steel or aluminum and having a tile structure and a second tape (25).

Applicants provisionally elect, with traverse, to prosecute species a1, characterized by the Examiner as the tubular supports being copper and smooth or corrugated. The following claims read on this provisional election: claims 27, 28, 30-37, 39, 40, and 43.

Regarding traverse of the election of species, in addition to the request for a reevaluation of the election of species requirement, Applicants respectfully submit that the search and examination of this entire application can be made without serious burden. As such, MPEP § 803, ¶ 2, requires that the entire application be examined on the merits. Further, Applicants note that Examiner Vu, the previous examiner, did conduct the search and

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

examination of this entire application without serious burden, as demonstrated by the Office Action mailed August 23, 2001.


Additionally, Applicants note that Section 7 of the Office Action indicates, upon allowance of a generic claim, that Applicants will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim. And Section 5 of the Office Action indicates that, currently, independent claim 27 is generic. Finally, Applicants note that dependent claims 28-43 all depend from claim 27 or claims dependent from claim 27.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: November 20, 2002

By:   
Lawrence F. Galvin  
Reg. No. 44,694

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com